

## WHAT IS CLAIMED IS:

1. A bioactive glass having a composition substantially comprising 30 to 60 mol % of CaO, 40 to 70 mol % of SiO<sub>2</sub>, and 20 mol % or less of Na<sub>2</sub>O.
- 5 2. The bioactive glass according to claim 1, further comprising CaF<sub>2</sub>.
3. The bioactive glass according to claim 1, further comprising B<sub>2</sub>O<sub>3</sub>.
4. The bioactive glass according to claim 1, wherein said bioactive glass has a glass transition temperature of 790°C or lower.
5. The bioactive glass according to claim 1, wherein a difference 10 between its glass transition temperature and its crystallization initiation temperature is 80°C or more.
6. The bioactive glass according to claim 1, wherein said bioactive glass generates a  $\beta$ -wollastonite crystal at a crystallization temperature.
7. A bioactive glass having a composition substantially comprising 15 30 to 60 mol % of CaO, 40 to 70 mol % of SiO<sub>2</sub>, and at least one of Na<sub>2</sub>O, CaF<sub>2</sub> and B<sub>2</sub>O<sub>3</sub>, Na<sub>2</sub>O being 20 mol % or less, CaF<sub>2</sub> being 1 mol %, and B<sub>2</sub>O<sub>3</sub> being 5 mol % or less.
8. The bioactive glass according to claim 1, wherein said bioactive glass is substantially free from P<sub>2</sub>O<sub>5</sub>.
- 20 9. The bioactive glass according to claim 7, wherein said bioactive glass is substantially free from P<sub>2</sub>O<sub>5</sub>.
10. A sintered calcium phosphate glass comprising the bioactive glass recited in claim 1 as a sintering aid.
11. The sintered calcium phosphate glass according to claim 10, 25 wherein said sintered calcium phosphate glass comprises a calcium phosphate of a hydroxyapatite, a carbonated apatite or tricalcium phosphate.